

**WHAT IS CLAIMED:**

1. A process for producing a paper wrapper having reduced ignition proclivity characteristics when incorporated into a smoking article comprising the following steps:

5 providing a paper wrapper comprised of a paper web;

applying a film-forming composition to said paper wrapper at particular locations, said film-forming composition forming treated discrete areas on said wrapper, said discrete areas separated by untreated areas, said film-forming composition comprising an aqueous composition, said film-forming composition containing a film-forming material and a particulate, substantially non-reactive inorganic filler, said treated discrete areas reducing ignition proclivity, said treated areas reducing ignition proclivity by reducing oxygen to a smoldering coal of the cigarette as the coal burns and advances into said treated areas.

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2. A process as defined in claim 1, wherein the film-forming material comprises an alginate, a pectin, a silicate, a cellulose derivative, guar gum, a starch, a modified starch, polyvinyl acetate, or a polyvinyl alcohol.

20 3. A process as defined in claim 1, wherein the inorganic filler comprises a clay, calcium carbonate, or a metal oxide.

4. A process as defined in claim 2, wherein the inorganic filler comprises a clay, calcium carbonate, or a metal oxide.

25 5. A process as defined in claim 1, wherein the inorganic filler comprises calcium carbonate.

6. A process as defined in claim 2, wherein the inorganic filler comprises calcium carbonate.

7. A process as defined in claim 1, wherein multiple layers of the film-forming composition are applied to the paper wrapper for forming the treated discrete areas.

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8. The process of claim 7, wherein said multiple layers are applied to the paper wrapper using a method selected from the group consisting of flexography, direct gravure printing, and offset gravure printing.

5 9. The process as in claim 1, wherein said treated areas comprise a plurality of discrete circumferential bands disposed longitudinally along said smoking article.

10 10. The process of claim 1, wherein said film-forming composition comprises an alginate.

11. The process of claim 1, wherein said film-forming composition comprises a pectin.

12. The process of claim 1, wherein said film-forming composition comprises a silicate.

15 13. The process of claim 1, wherein said film-forming composition comprises a polyvinyl alcohol.

14. The process of claim 1, wherein the film-forming composition comprises a starch.

15. The process of claim 1, wherein the film-forming composition comprises a cellulose derivative.

20 16. The process of claim 1, wherein the paper wrapper has a permeability of at least about 60 Coresta prior to applying said film-forming composition.

25 17. The process of claim 16, wherein said paper wrapper has a permeability of less than about 20 Coresta within the treated discrete areas.

18. The process of claim 1, wherein the treated discrete areas have a BMI of from about  $1 \text{ cm}^{-1}$  to about  $8 \text{ cm}^{-1}$ .

30 19. A process for producing a smoking article comprising the step of surrounding a tobacco column with the paper wrapper defined in claim 1.

20. A smoking article having reduced ignition proclivity characteristics comprising:

a column comprising a tobacco; and

a paper wrapper surrounding the column of the  
5 tobacco, the paper wrapper including discrete areas treated with an aqueous film-forming composition, the treated areas being separated by untreated areas, the film-forming composition comprising a film-forming material and a substantially non-reactive inorganic filler, the treated areas reducing ignition proclivity by reducing oxygen to a smoldering  
10 coal of the smoking article as the coal burns and advances into the treated areas.

21. A smoking article as defined in claim 20, wherein the film-forming material comprises an alginate, a pectin, a silicate, a cellulose derivative, guar gum, a starch, a modified starch, polyvinyl acetate, or a  
15 polyvinyl alcohol.

22. A smoking article as defined in claim 20, wherein the inorganic filler comprises a clay, calcium carbonate, or a metal oxide.

23. A smoking article as defined in claim 21, wherein the inorganic filler comprises a clay, calcium carbonate, or a metal oxide.

20 24. A smoking article as defined in claim 20, wherein the inorganic filler comprises calcium carbonate.

25. A smoking article as defined in claim 21, wherein the inorganic filler comprises calcium carbonate.

26. A smoking article as defined in claim 20, wherein the  
25 treated areas comprise multiple layers, at least one layer comprising the film-forming composition.

27. The smoking article as defined in claim 20, wherein said treated areas comprise a plurality of discrete circumferential bands disposed longitudinally along said smoking article.

28. The smoking article as defined in claim 20, wherein said film-forming composition comprises an alginate.

29. The smoking article as defined in claim 20, wherein said film-forming composition comprises a pectin.

5 30. The smoking article as defined in claim 20, wherein said film-forming composition comprises a silicate.

31. The smoking article as defined in claim 20, wherein said film-forming composition comprises a polyvinyl alcohol.

10 32. The smoking article as defined in claim 20, wherein the film-forming composition comprises a starch.

33. The smoking article as defined in claim 20, wherein the film-forming composition comprises a cellulose derivative.

15 34. The smoking article as defined in claim 20, wherein the paper wrapper has a permeability of at least about 60 Coresta prior to applying said film-forming composition.

35. The smoking article as defined in claim 34, wherein said paper wrapper has a permeability of less than about 20 Coresta within the treated discrete areas.

20 36. The smoking article as defined in claim 20, wherein the treated discrete areas have a BMI of from about  $1 \text{ cm}^{-1}$  to about  $8 \text{ cm}^{-1}$ .

37. A paper wrapper for a smoking article that provides the smoking article with reduced ignition proclivity characteristics comprising:

a paper web designed to surround a smokeable filler, the paper web including discrete areas treated with a film-forming composition, the treated areas being separated by untreated areas, the  
25 film-forming composition comprising an aqueous composition containing a film-forming material and a substantially non-reactive inorganic filler, the filler comprising a clay, calcium carbonate, or a metal oxide, the film-forming material comprising an alginate, a pectin, a silicate, a cellulose  
30 derivative, guar gum, a starch, a modified starch, polyvinyl acetate, or a

polyvinyl alcohol, the treated areas reducing the ignition proclivity of a smoking article incorporating the wrapper.

38. The paper wrapper as defined in claim 37, wherein the paper wrapper has a permeability of at least about 60 Coresta prior to  
5 applying said film-forming composition.

39. The paper wrapper as defined in claim 37, wherein the film-forming material comprises an alginate.

40. The paper wrapper as defined in claim 37, wherein the filler comprises calcium carbonate.